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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/630;984	08/02/2000	Hirobumi Kawamura	FUJO 17.621	8068
26304	7590	08/03/2004		
KATTEN MUCHIN ZAVIS ROSENMAN 575 MADISON AVENUE NEW YORK, NY 10022-2585				
			EXAMINER BOCCIO, VINCENT F	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/630,984

Applicant(s)

KAWAMURA ET AL.

Examiner

Vincent F. Boccio

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,12-14,16-21 and 24 is/are rejected.
- 7) ☒ Claim(s) 3,10,11,15,22 and 23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2616.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-7, 13-14, 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Chaddha et al. (US 5,621,660).

Regarding claim 1, Chaddha in Fig.1, discloses and meets the limitations associated an image on demand transmitting device performing an image transmission by an on demand request (Fig. 1, "server 20 to end user 40", col. 10, lines 30-, "point to point demand", "VCR style functionality", ect....., col. 11, lines 31-), from a receiving side/device, comprising:

- o a unit obtaining an image (Fig. 1, source of video from 10, therefore, meeting the limitation of a unit);
- o a buffering memory unit (disks 90), temporarily storing the image obtained by the image obtaining unit;
- o a quasi moving image transmission unit (server 10) transmitting a quasi-moving image acquired by degrading a quality and a frame rate of the image obtained by the image obtaining unit (Fig. 2, "Base 160x120, First 320x240, Second 640x480, or 3 layers", generated by the Scalable Video Encoder 60 of server 20);
- o a transmitting unit performing a predetermined process (Fig. 1, either met by video encoder 60 or "rate scaling on network") for an image read from the buffer memory unit and

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for transmitting the image to the receiving side (40).

Regarding claims 4-6 and 16-17, Chaddha further meets the limitations of wherein the transmitting unit reads a plurality of frames (video), from the buffer generates a single frame by reducing and synthesizing the plurality of particularly frames (Fig. 2, frames 260, 340 and 400, and at the video interval time}, by reducing by encoding the generated frame to a sharp image (Fig. 2, decimating elements "210 and 230"), and upon request transmits the encoded image (or even images), to the receiving side, upon request or pulled by a user,

as recited in claims 5-6 and 17-18, wherein the transmission unit encodes to a sharp image only an image that is partially extracted (decimate 210), thereafter encoded to a sharp image (Fig. 2, such as output 340 after 310, encode at 330, or even output 400 for example), wherein upon request selecting an extraction pattern (image resolution selection upon request) on the receiving side (col. 10, point to point or uni-cast).

Regarding claims 7 and 19, Chaddha further meets the limitation of serial numbers are assigned to respective image frames of the quasi-moving image and a serial number is specified with a predetermined method on the receiving side, so that a transmission request is issued to the transmitting unit,

0 wherein the serial number is used to identify the different resolution images (col. 8, lines 11-, "frame sequence number"), wherein upon the user requesting full view, from a less than full view, the server migrates to full resolution, therefore, based on a user request the server migrates to full resolution using the identification of the images, thereby the user is provided with additional layers, providing full or migrated resolution to full resolution, from either the base to base & first, or base & first & second layers, or images requested being specified resolution browsing by the user (col. 8, lines 63-, "user may then select for full review Server migrates to full resolution").

Claims 13-14 is analyzed and discussed with respect to the claims above.

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaddha et al. (US 5,621,660) in view of Watanabe (US 6,430,354).

Regarding claim 2, Chaddha discloses transmitting an image encoding to a sharp image, after being stored (Fig. 1, "90") and transmitting the encoded image to the receiving side.

Chaddha fails to particularly disclose reading an image from a buffer unit, encoding from the buffer unit, further there exist no disclosure to support buffering prior to encoding associated with unit 60 {Scalable Encoder 60}.

It is well known to buffer prior to an encoding step.

Watanabe teaches a Fig.6, receiving thru unit 68, from another unit, such as a R/R device or other (col. 7, lines 47-50), routing to buffer 63 c (col. 7), wherein a multi-level coding program 63b performs coding according to a plurality of resolution levels, wherein a buffer 63 for use as work area, thereafter encoded resolutions are thereafter stored in

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Multilevel coding moving image data file 67 a or another buffer, after encoding, as taught by Watanabe.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify Chaddha by providing buffering, as a work area, for encoding, after encoding to store the encoded resolutions, from the encoder, as taught by Watanabe.

5. Claims 8-9, 12, 20-21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaddha et al. (US 5,621,660) in view of Tindell et al. (US 5,130,792).

Regarding claim 8, Chaddha meets all limitations as claimed except for providing a second buffering, wherein the storing to the second buffer is based on a request issues from the receiving side, wherein further performing a process for the image/images and transmitting to the receiving side based on a request.

Tindell teaches upon a request for an image/images from mass storage/buffering Fig.2, "22", wherein upon a request the encoded images are transferred to another buffer wherein a predetermined process is performed (Fig.4, buffer 56, associated with a control element 58 and drivers 60, 62 to a coupler), provided in order to provide image/images to the user based on a request, as taught by Tindell.

Therefore, it would have been obvious to one skilled in the art to modify the prior art applied, by providing a second buffer element associated with a predetermined process, in the process of providing the requested image/images, as taught by Tindell.

Regarding claim 9, based on the combination as applied, meets the limitation of wherein the transmitter reads an image from the second buffer, wherein the image read is encoded to a sharp image and wherein the transmitter transmits the read image to the receiving side.

Claims 12, 20-21 and 24 are analyzed and discussed with respect to the claims above.

Allowable Subject Matter

1. Claims 3, {10 & 11/10}, 15, 22}, {11/9}, 23/21 are objected to as being dependent upon a rejected base claim, but would be

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allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims {3, 10, 15, 22} and including 11/10/8}, the prior art compression encodes all images in different resolutions and stores and upon a request, merely reproduces image/images, from storage or buffer-ed already encoded.

Regarding claims 3, {10, 11/10/8, 15, 22, the prior art of record fails to teach, disclose or fairly suggest,

- wherein the transmitting unit reads an image from the buffer, encodes the image, to a sharp image and transmits the encoded image to the receiving side and **at the same time sequentially reads a succeeding or preceding image, which is stored in the buffer unit, encodes the frame to a sharp image and transmits the image to the receiving side.**

Regarding claims 11/9 and 23/21, resp., which depends from claim 9 and 21 resp., wherein claim 11 is a multi-dependent {9 or 10}, since claim 9 is presently rejected,

the art of record fails to further meet, disclose or fairly suggest, the system further comprising:

- a thumbnail buffer memory unit putting into a thumbnail {form}, a quasi moving image frame when a temporary storage request is issued from the receiving side to the second buffer memory unit and for storing in the thumbnail, wherein the receiving side identifies an image frame stored in the second buffer memory unit by specifying a thumbnail stored in the thumbnail buffer memory unit.

Contact Fax Information

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

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(703) 872-9314, (for formal communication intended for entry)

or:

(703) 308-5359, (for informal or draft communications, please label "PROPOSED" or "DRAFT")


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Contact Information

1. Any inquiry concerning this communication or earlier communications should be directed to the examiner of record, Monday-Thursday, 8:00 AM to 5:00 PM Vincent F. Boccio (703) 306-3022.

Any inquiry of a general nature or relating to the status of this application should be directed to Customer Service (703) 306-0377.

Primary Examiner, Boccio, Vincent
7/26/04


VINCENT BOCCIO
PRIMARY EXAMINER